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**From:** Goodwin, Cathleen@Waterboards [Cathleen.Goodwin@waterboards.ca.gov]  
**Sent:** 8/28/2019 4:18:29 PM  
**To:** Fondahl, Lauren [Fondahl.Lauren@epa.gov]  
**CC:** Whitson, Amelia [Whitson.Amelia@epa.gov]  
**Subject:** RE: Sludge Monitoring Language in Crescent City NPDES Permit

Good Morning, Lauren:

The City of Crescent City has had a lot of staff turnover and new staff are asking questions about permit requirements to make sure that they understand. This week, Crescent City's lab director asked me about the annual sludge monitoring requirements in their permit. I dug back through my emails from two years ago and pulled up this email conversation that I had with you. I re-read what you communicated to me and want to clarify a couple of things.

1. On 8/10/2017, you stated "If Crescent City has sludge monitoring requirements in the pretreatment portion of their permit, they don't need to be in the sludge monitoring portion. I think they would want to monitor the sludge as well as influent and effluent for priority pollutants, as some of these may be most readily detected in the sludge. Crescent City sends all their sludge to a landfill in Oregon, so they wouldn't have sludge monitoring requirements under 503."

Crescent City's permit doesn't have explicit sludge monitoring requirements in the pretreatment portion of their permit. They have a requirement to provide a written technical evaluation of the need to revise local limits during the permit term, and I would anticipate including this as a once per permit term requirement in future permits. The City submitted its local limits evaluation in August 2017 with a recommendation to revise local limits. The City submitted a local limits study work plan that includes a proposal to monitor in the collection system, influent, effluent, and sludge as part of this study.

- a. ***Is it sufficient for the sludge monitoring related to the pretreatment program to be addressed whenever they review local limits, or should the permit include a specific requirement to monitor sludge at some regular frequency in the pretreatment section, or is appropriate to retain some form of sludge monitoring language in a Sludge Monitoring section of the permit (which is how it is addressed in Crescent City's, as well as Santa Rosa's and Eureka's current permits)?***
  - b. ***Is it excessive to retain Crescent City's current requirement to monitor sludge, influent and effluent concurrently on an annual basis? Since Crescent City's data hasn't revealed any concerning levels of toxic pollutants in the sludge, it seems like this could be cut back to a once per permit term requirement.***
2. In your email dated 8/22/2017, you stated, "In the past, EPA has recommended testing biosolids for the priority pollutants as part of developing POTWs' source control programs, but the Regional Board can make the call as to whether this testing is still needed to determine if there are industrial pollutants that show up most readily in the biosolids and that need to be tracked." You further noted that data that you have access to shows that Crescent City and Santa Rosa had pollutant levels in sludge typical of 100% domestic wastewater, while Eureka had some higher concentrations for cadmium and lead.

This statement tells me that EPA leaves it up to the Regional Boards to make the call as to whether the sludge testing is still needed. I've only been involved with Crescent City, Eureka, and Santa Rosa for about 3.5 years. Santa Rosa's permit requires quarterly monitoring of sludge, while Eureka's permit requires "Sludge sampling shall be conducted according to the requirements specified by the location and type of disposal activities undertaken." All of the permits include language that requires compliance with all of the land application and disposal requirements in 40 CFR 503.

Given the differences in sludge monitoring requirements in these 3 permits, which are the North Coast Region's three permittees with formal pretreatment programs, I want to revisit this issue of sludge monitoring requirements with you. The language in all three permits is in a permit section titled "Sludge Monitoring". The language in the

Santa Rosa and Eureka permits doesn't say anything that would tie the requirement to the pretreatment program, while the language in Crescent City's permit does have an implicit connection to the pretreatment program by inclusion of paragraph A.2 (scroll to bottom of email to see this language).

***I am currently working on Santa Rosa's permit renewal, so I'd like to determine whether we continue to include sludge monitoring requirements in a Sludge Monitoring section or whether we need to modify the language to have a more explicit tie to pretreatment. For Santa Rosa, I believe that the sludge monitoring requirement is to satisfy land application requirements, but the data is also useful for determining whether the pretreatment program is effective in preventing the discharge of toxic pollutants into the City's treatment plant.***

I hope this email isn't too confusing. I am still learning pretreatment program requirements, as well as biosolids requirements. I want to lean on yours and Amelia's expertise to help me make our permit language as complete and accurate as possible.

After you have a chance to review, this, perhaps we could find a time to talk by phone to sort through this. It would be helpful to have Amelia present too to help me understand how to satisfy sludge monitoring requirements as they apply to disposal as well as to pretreatment.

Thank You.

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**From:** Goodwin, Cathleen@Waterboards  
**Sent:** Tuesday, August 22, 2017 11:59 AM  
**To:** 'Fondahl, Lauren' <Fondahl.Lauren@epa.gov>  
**Cc:** Whitson, Amelia <Whitson.Amelia@epa.gov>  
**Subject:** RE: Sludge Monitoring Language in Crescent City NPDES Permit

Thank you for this response, Lauren.

Amelia -- I just want to check in with you on this matter. Is there any explicit requirement in the pretreatment regs to monitor sludge for priority pollutants on an annual basis? After Crescent City called me to get a better understanding regarding this requirement, I checked Eureka and Santa Rosa's permits (both facilities have a formal pretreatment program) and neither facility has this requirement to monitor sludge for priority pollutants annually. I can't find the background info that lead to me putting this requirement in Crescent City's MRP. The City asked if there is any room for modification of this requirement, and it appears that there is. The main industrial users in the City are food industries (Rumiano Cheese and a couple of breweries). The only toxic Ocean Plan pollutants that they have RP for in their effluent are copper, nickel, Dieldrin, and TCDD Equivalents. The City suspects that the Dieldrin. I would propose possibly having them sample their sludge one time and removing the monitoring requirement if nothing shows up at levels of concern. But again, because Santa Rosa and Eureka don't have this requirement, I'm wondering if Crescent City should have gotten it. If this is an important monitoring requirement for these facilities with pretreatment programs, I will propose that we must include the requirement in all three permits.

I look forward to hearing your input.

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**From:** Fondahl, Lauren [<mailto:Fondahl.Lauren@epa.gov>]  
**Sent:** Tuesday, August 22, 2017 11:41 AM  
**To:** Goodwin, Cathleen@Waterboards <[Cathleen.Goodwin@waterboards.ca.gov](mailto:Cathleen.Goodwin@waterboards.ca.gov)>  
**Cc:** Whitson, Amelia <[Whitson.Amelia@epa.gov](mailto:Whitson.Amelia@epa.gov)>  
**Subject:** RE: Sludge Monitoring Language in Crescent City NPDES Permit

Hi Cathy,

In the past, EPA has recommended testing biosolids for the priority pollutants as part of developing POTWs' source control programs, but the Regional Board can make the call as to whether this testing is still needed to determine if there are industrial pollutants that show up most readily in the biosolids and that need to be tracked. These pollutants can be tested using the methods in 136 or SW-846. Past monitoring results for biosolids reported by Crescent City have shown inorganics levels typical for 100% domestic WWTPs (at least for those inorganic pollutants regulated under 503). Santa Rosa has also showed levels typical for domestic WWTPs, while Eureka has reported somewhat higher-than-normal levels for cadmium and lead (although well within the 503 limits).

Since Crescent City sends all of its biosolids to a municipal landfill, and as far as we know has no plans to shift to an alternate use or disposal method in the next five years, they do not have other monitoring requirements under 503.

Thanks,

Lauren

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**From:** Goodwin, Cathleen@Waterboards [<mailto:Cathleen.Goodwin@waterboards.ca.gov>]  
**Sent:** Thursday, August 17, 2017 5:43 PM  
**To:** Fondahl, Lauren <[Fondahl.Lauren@epa.gov](mailto:Fondahl.Lauren@epa.gov)>  
**Cc:** Whitson, Amelia <[Whitson.Amelia@epa.gov](mailto:Whitson.Amelia@epa.gov)>  
**Subject:** RE: Sludge Monitoring Language in Crescent City NPDES Permit

Lauren:

Thank you for this response. I remember adding this requirement to monitor sludge annually for priority pollutants based on emails with EPA leading up to the permit renewal. The permit Fact Sheet states, "Sludge Monitoring. New sludge monitoring requirements at Monitoring Location BIO-001 serve as a basis for the Permittee to develop the Sludge Handling and Disposal Activity Report that is required as part of the Annual Report pursuant to section X.D.2.f of the MRP. In addition, this Order establishes annual sludge monitoring requirements for priority pollutants to satisfy U.S. EPA pretreatment requirements."

Your email seems to be confirming that U.S. EPA expects sludge monitoring to satisfy U.S. EPA pretreatment requirements. Crescent City said that their lab was surprised when asked to give a cost estimate for this

monitoring. The lab said that they aren't aware of priority pollutant test methods for sludge, only for liquid wastewater (influent, effluent).

I just want to make sure that this monitoring requirement has been properly established in Crescent City's monitoring and reporting program. I don't see the same requirement in the Eureka NPDES permit that was adopted about 8 months before Crescent City, nor in Santa Rosa's NPDES permit that was adopted in 2013.

Thank you for any additional guidance you can offer to help me address Crescent City's concern and to understand the basis for this requirement.

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**From:** Fondahl, Lauren [<mailto:Fondahl.Lauren@epa.gov>]  
**Sent:** Thursday, August 10, 2017 3:23 PM  
**To:** Goodwin, Cathleen@Waterboards <[Cathleen.Goodwin@waterboards.ca.gov](mailto:Cathleen.Goodwin@waterboards.ca.gov)>  
**Cc:** Whitson, Amelia <[Whitson.Amelia@epa.gov](mailto:Whitson.Amelia@epa.gov)>  
**Subject:** RE: Sludge Monitoring Language in Crescent City NPDES Permit

Hi Cathy,

If Crescent City has sludge monitoring requirements in the pretreatment portion of their permit, they don't need to be in the sludge monitoring portion. I think they would want to monitor the sludge as well as influent and effluent for priority pollutants, as some of these may be most readily detected in the sludge. Crescent City sends all their sludge to a landfill in Oregon, so they wouldn't have sludge monitoring requirements under 503.

Lauren

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**From:** Goodwin, Cathleen@Waterboards [<mailto:Cathleen.Goodwin@waterboards.ca.gov>]  
**Sent:** Thursday, August 10, 2017 12:02 PM  
**To:** Fondahl, Lauren <[Fondahl.Lauren@epa.gov](mailto:Fondahl.Lauren@epa.gov)>  
**Cc:** Whitson, Amelia <[Whitson.Amelia@epa.gov](mailto:Whitson.Amelia@epa.gov)>  
**Subject:** Sludge Monitoring Language in Crescent City NPDES Permit

Hi Lauren and Amelia:

Crescent City staff called me today for clarification about sludge monitoring language in Crescent City's NPDES permit that was adopted by the Regional Water Board this year. They are getting set up to do all of their annual monitoring for priority pollutants. Here's the language:

**A. Sludge Monitoring (Monitoring Location BIO-001)**

1. Sludge sampling shall be conducted according to the requirements specified by the location and type of disposal activities undertaken.
2. Sludge shall be sampled annually for those pollutants U.S. EPA has identified under section 307(a) of the CWA and referenced in section 401.15 of 40 C.F.R. Sludge shall be sampled during the same 24-hour period as influent and effluent sampling analysis and sampled for pollutants specified in CWA section 307(a)(1) and referenced in section 401.15 of 40 C.F.R. The sludge analyzed shall be a composite sample of a minimum of 12 discrete samples taken at equal time intervals over the 24-hour period. Sampling and analysis shall be performed in accordance with the techniques prescribed in 40 C.F.R. part 136 and amendments thereto.
3. Sampling records shall be retained for a minimum of 5 years. A log shall be maintained for sludge quantities generated and of handling and disposal activities. The frequency of entries is discretionary, however, the log must be complete enough to serve as a basis for developing the Sludge Handling and Disposal report that is required as part of the Annual Report.

They are wondering if this language, and the list of pollutants identified in CWA section 307(a)(1) is what EPA requires. They contacted their lab and were told that the list is 307(a)(1) is for liquid (wastewater) and not for solids. They are accustomed to the tests and methods that they have routinely been required to monitor for prior to disposal of biosolids at a landfill.

I'm not recalling how I developed this language, but I believe I developed it from something that Lauren had sent. Any thoughts and guidance you can offer to me before I respond back to Crescent City will be most appreciated!

Cathy

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